

1 **WE CLAIM:**

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3 1. The method of providing a mop with
4 surface scrubbing capability, that includes:

5 a) providing a surface scrubbing attachment
6 device, and

7 b) attaching said device to the mop for
8 scrubbing presentation to the surface to be scrubbed.

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11 2. The method of claim 1 wherein the mop
12 has a handle, and including manipulating said handle to
13 exert force that clamps the attachment device to the
14 mop at or proximate the mop head.

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17 3. The method of claim 2 wherein the device
18 is provided with a tongue to be positioned and clamped
19 between the mop handle and mop head.

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22 4. The method of claim 3 wherein one of the
23 following is employed:

24 i) the tongue defines a hole to pass

1 the handle end, or to pass a
2 projection to which the handle end
3 fits,

4 ii) the tongue has a clampable portion
5 to be positioned for reception of
6 said clamping force.

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9 5. The method of claim 1 wherein said
10 device is provided with projecting floor scrubbing
11 elements.

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14 6. The method of claim 5 wherein certain of
15 said elements project in a first direction, and other
16 of said elements project in a second direction.

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19 7. The method of claim 6 wherein all of
20 said elements comprise bristles.

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23 8. The method of claim 7 wherein the
24 bristles have supporting portions fused to a base
25 defined by the device.

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1 9. The method of claim 6 wherein said
2 elements are carried by a base defined by said device,
3 the based having a first surface facing in said first
4 direction, and a second surface facing in the second
5 direction, said surfaces relatively angled at an obtuse
6 angle.

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9 10. The method of claim 2 wherein said
10 device is provided in the form of a sheet or sheets
11 that in cross-section define a bend, whereby a first
12 portion of the sheet defines or carries a floor
13 scrubber, and a second portion of the sheet or sheets
14 defines a tongue extending at an angle to said first
15 portion, the tongue configured to receive said
16 clamping force, the first portion of the sheet
17 configured to extend adjacent mop strands.

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20 11. Apparatus for providing a mop with
21 surface scrubbing capability, comprising in
22 combination:

- 23 a) a surface scrubbing device,
24 b) said device having an attachment for
25 rigid connection to the mop.

1 12. The apparatus as defined in claim 11
2 including said mop which has a handle, said attachment
3 clamped to the mop at or near the mop head, by force
4 exerted via the mop handle.

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7 13. The apparatus of claim 12 wherein the
8 attachment includes a tongue clamped in position
9 between the mop handle and the mop head.

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12 14. The apparatus of claim 3 wherein one of
13 the following exists:

14 i) the tongue defines a hole to pass
15 the handle end, or to pass a
16 projection to which the handle end
17 fits,

18 ii) the tongue has a clampable portion
19 to be clamped in position adjacent
20 the handle and head.

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23 15. The apparatus of claim 11 wherein said
24 device includes projecting floor scrubbing elements.

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1 16. The apparatus of claim 15 wherein
2 certain of said elements project in a first direction,
3 and other of said elements project in a second
4 direction.

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7 17. The apparatus of claim 16 wherein all of
8 said elements comprise bristles.

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11 18. The method of claim 17 wherein the
12 bristles have supporting portions fused to a base
13 defined by the device.

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16 19. The method of claim 16 wherein said
17 elements are carried by a base defined by said device,
18 the base having a first surface facing in said first
19 direction, and a second surface facing in the second
20 direction, said surfaces relatively angled at an obtuse
21 angle.

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1 20. The apparatus of claim 12 where said
2 device has the form of a sheet or sheets that in cross-
3 section define a bend, whereby a first portion of the
4 sheet defines or carries a floor scrubber, and a second
5 portion of the sheet or sheets defines a tongue
6 extending at an angle to said first portion, the tongue
7 configured to receive said clamping force, the first
8 portion of the sheet configured to extend adjacent mop
9 strands.

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12 21. The apparatus of claim 13 wherein one of
13 the following exists:

14 i) there are two holes of different sizes
15 associated with the tongue to selectively register with
16 different mop handles,

17 ii) there is a foldable flap associated with
18 the tongue, and a first hole carried by the tongue and
19 a second hole carried by the flap, the holes being of
20 different sizes, the second hole registering with the
21 first hole when the flap is folded.

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1 22. The apparatus of claim 21 wherein the
2 apparatus includes a section carrying a scrubbing
3 element or elements, said section having hinged
4 operative connection to said tongue.

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7 23. The apparatus of claim 22 wherein said
8 hinged operative connection includes a living hinge.

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11 24. The apparatus of claim 22 including a
12 pad carrying said elements, the pad being attached to a
13 plate portion of said sections.

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16 25. The apparatus of claim 24 wherein the
17 attachment is defined by one of the following:

- 18 x₁) a bond,
19 x₂) an interfit connection,
20 x₃) projections and apertures receiving
21 the projections, the projections
22 located on one of the tongue and
23 plate portions, and the apertures
24 located in the other of the plate
25 portion and tongue.

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1 26. The apparatus of claim 13 wherein the
2 apparatus includes a tongue, and a section carrying
3 scrubbing elements, said section having hinged
4 operative connection to said tongue.

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7 27. The apparatus of claim 26 wherein said
8 hinged operative connection includes a living hinge.

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11 28. The apparatus of claim 27 including a
12 pad carrying said elements, the pad being attached to a
13 plate portion of said section.

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16 29. The apparatus of claim 28 wherein the
17 attachment is defined by one of the following:

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x₁) a bond,

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x₂) an interfit connection,

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x₃) projections and apertures receiving

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projections, the projections

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located on one of the tongue and

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plate portions, and the apertures

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located in the other of the plate

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portion and tongue.

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1 30. The apparatus of claim 24 wherein said
2 plate portion is elongated, and has one of the
3 following:

- 4 i) length between one inch or fifteen
5 inches,
6 ii) has length which is about 7 ¼ inches.

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9 31. The apparatus of claim 11 wherein said
10 attachment has two holes of different sizes associated
11 with the tongue to selectively register with different
12 mop handles.

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15 32. The apparatus of claim 11 wherein the
16 attachment has an adapter defining a first through
17 hole, and a tongue defining a second through hole, the
18 holes being of different sizes.

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21 33. The apparatus of claim 32 wherein the
22 adapter is a flap foldable at a living hinge associated
23 with the attachment.

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1 34. The method of claim 1 including
2 providing said attachment with two holes of different
3 sizes associated with the tongue to selectively
4 register with different mop handles.

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7 35. The method of claim 1 including
8 providing an adapter in association with said
9 attachment, the adapter defining a first through hole,
10 and a tongue defining a second through hole, the holes
11 being of different sizes.

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14 36. The apparatus of claim 35 wherein the
15 adapter is provided in the form of a flap foldable at a
16 living hinge associated with the attachment.

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19 37. Apparatus, comprising
20 a) a scrubber carrier attachable to a mop
21 that has a handle,
22 b) said carrier having two through holes of
23 two different cross sectional areas, to register with
24 mop handle structure,
25 c) said holes selectable to enable use of a
26 selected size mop handle structure.

1 38. The apparatus of claim 37 wherein said
2 carrier has weight between 1 oz. and 32 oz. and
3 consists of plastic material.

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6 39. The apparatus as defined in claim 12,
7 including a claw that clamps to the attachment and to
8 the mop head in response to said force, said claw
9 associated with the mop handle.

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